



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,963	03/16/2005	Xiao-fan Feng	SLA1321 (7146.0329)	9041
55648	7590	04/14/2009	EXAMINER	
KEVIN L. RUSSELL			YEH, EUENG NAN	
CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP				
1600 ODS TOWER			ART UNIT	
601 SW SECOND AVENUE			PAPER NUMBER	
PORTLAND, OR 97204			2624	
			MAIL DATE	
			DELIVERY MODE	
			04/14/2009	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,963	Applicant(s) FENG ET AL.	
	Examiner EUENG-NAN YEH	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Response to Amendment

1. The following Office Action is responsive to the amendment and remarks received on January 22, 2009. Claims 1-18 remain pending

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 (and therefore 2-19 by dependency), 20 (and therefore 21-24 by dependency), and 25 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions (*In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008)) indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claims recite a series of steps or acts to be performed, the claims neither transform underlying subject matter nor positively tie to

Art Unit: 2624

another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. In order for a process to be "tied" to another statutory category, the structure associated with another statutory category must be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly. For example the amended method claim 1 performs the steps comprising: receiving an image, quantizing images, comparing images, selecting quantizer, and encoding said image, wherein none of above steps positively "tied" to another statutory category. Although a computer-readable medium is recited, it does not impose meaningful limits on the method claim's scope which is to encoding an image wherein the computer-readable medium is a storage medium such as hard disk, RAM, etc. This insignificant storage medium will not transform an unpatentable principle into a patentable process.

Secondly, a qualifying transformation is NOT recited for at least the reason that the data is not claimed as representing a physical object or substance. Furthermore, there is no external depiction of the transformed/modified data, such as but not limited to a visual display, wherein the stated "to be viewable on a display device" is not an external depiction.

Response to Arguments

a. Summary of Applicant's Remark:

The claim USC 112 and USC 101 rejections should be withdrawn in view of the amendment.

Examiner's Response:

Examiner agrees, and the previous USC 112 and USC 101 rejections are withdrawn. However, the amended claims raise another USC 101 rejection. See discussion above.

Examiner's Comments

3. The following is examiner's comments about claims 1 (and therefore 2-19 by dependency), 20 (and therefore 21-24 by dependency), and 25:

4. Claims 1 (and therefore 2-19 by dependency), 20 (and therefore 21-24 by dependency), and 25 are rejected under USC §101 and would be allowable if amended to overcome the rejections set forth in this Office action above. These claims comprise the following features in combination with other recited limitations, which the closest prior art of record and the references cited in form PTO-1449 taken either singly or in combination does not teach or suggest:

- quantizing said discrete cosine transform of said image using a second set of quantization values different from said first set of quantization values, and where

Art Unit: 2624

neither said first set of quantization values nor said second set of quantization values are calculated using data from said image; comparing said image to a spatial reconstructed image based upon said first set of quantization values using a visual difference model that simulates the perception of the human eye; comparing said image to a spatial reconstructed image based upon said second set of quantization values using said visual difference model; selecting one of said first set of quantization values and said second set of quantization values based upon respective said comparing (independent claim 1).

- comparing said first image to a spatial reconstructed image based upon said first set of quantization values using a model to determine an error measure; based upon said error measure, scaling said first set of quantization values by applying a single common scaling factor to each quantization value within said first set of quantization values, said scaling factor having a value not dependent on information from said first image (independent claim 20).
- quantizing said discrete cosine transform of said first image using a second set of quantization values different from said first set of quantization values, and where neither said first set of quantization values nor said second set of quantization values are calculated using data from said image; comparing said first image to a spatial reconstructed image based upon said first set of quantization values using a model to determine an error measure; comparing said first image to a spatial reconstructed image based upon said second set of quantization values using said model to determine an error measure; selecting one of said first set of quantization

values and said second set of quantization values based upon respective said error measures (independent claim 25).

Conclusion

5. Applicant's amendment is rejected in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eueng-nan Yeh whose telephone number is 571-270-1586. The examiner can normally be reached on Monday-Friday 8AM-4:30PM EDT.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eueng-nan Yeh
Assistant Patent Examiner
Art Unit: 2624
/E.Y./

/Vikkram Bali/
Supervisory Patent Examiner, Art Unit 2624